

WHAT IS CLAIMED

1. An elevator (1) with a cage (3) held on a support (8), which is movable in upward and downward directions in a vertically extending shaft (2) by means of a drive motor (6) acting on said support (8) via a sheave (7) and being arranged in said shaft (2), said drive motor via at least one drive belt (15) acting on a pulley (9) arranged in parallel-axial manner, said pulley being combined with said sheave (7) coaxially correlated thereto to form a flat drive wheel (5), the circumferential frictional surface (10) of a brake being integrated into said drive wheel (5), characterized in that said support (8) consists of at least one flat band or synthetic rope which is directly wound around a part of said hub (17) of said drive wheel (5), said part on the corresponding position having a section showing the required sheave profile and thus forming said sheave (7).
2. The elevator as defined in claim 1, characterized in that the outer diameter of said surface wound of said sheave profile essentially corresponds to the outer diameter of said bearing (14) closest to said sheave profile (6), plus twice the amount of the wall thickness meaningful with respect to stability and stiffness aspects in this area, of the here sleeve-like section of said hub (17).
3. The elevator as defined in one of the preceding claims, characterized in that the width of said drive motor (6) including the pulley (6a) supported by it in axial direction does not exceed the width of said drive wheel (5) also in axial direction thereof.

SUBA37

made in one piece.

- Fig 4
10. An elevator as defined in one of the preceding claims, characterized in that said pulley (9) protrudes over said sheave (16, 17), wherein said pulley (9) can be embodied in a manner bent at right angle for forming a room for accommodating a brake means (18, 19), i.e. consists of an inner section (9b) bent at right angle and a disc-shaped section (9c) following in radially outward direction, supporting on its outer circumference a wheel rim (9a) onto which act said drive belts.
11. An elevator as defined in one of the preceding claims, characterized in that said section (9b) bent at right angle on its outer side (seen from its axis of rotation) forms the circumferential frictional surface (10) of a drum brake.
12. An elevator as defined in one of the preceding claims, characterized in that said section (9b) bent at right angles comprises an circumferential extension (9d) forming the circumferential frictional surface of a brake drum, said extension (9d) seen in axial direction protrudes over the outermost rim of said wheel rim (9a).
13. An elevator as defined in one of the claims 1 to 10, characterized in that said wheel rim (9a) onto which act said drive belts on its inner side (seen from its axis of rotation) forms the circumferential frictional surface (10) of a drum brake.

14. An elevator as defined in one of the preceding claims, characterized in that said flat band (8) consists of steel, of synthetic material or of a combination of synthetic material and steel.
15. An elevator as defined in one of the preceding claims, characterized in that said axis of rotation (12) of said drive wheel (5) is arranged in said guide plane (25) of said vertical guide rails (24) correlated to the vertical long central place of said elevator cage.
16. An elevator as defined in one of the preceding claims, characterized in that the speed of said drive wheel (9) is geared down with respect to the speed of said drive motor (6) and said cage is suspended on said support in block (i.e. at least in a ratio 2:1).